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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,804	12/14/2001	Mika Salmivalli	P284103 2980417US/KA/ HER	1649
909	7590	05/31/2005	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			TRUONG, THANHNGA B	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	

2135

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/014,804	<b>Applicant(s)</b> SALMIVALLI, MIKA	
	<b>Examiner</b> Thanhnga B. Truong	<b>Art Unit</b> 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Applicant's submission for RCE filed on March 18, 2005 has been entered. Claims 1-38 are pending.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kortessalmi et al (US 6, 427, 073).

a. Referring to claim 1:

i. Kortessalmi teaches:

(1) creating a database containing records which each contain a mobile equipment identity associated with a mobile station and at least one mobile subscriber identity [i.e., referring to Figures 6-8, a table 60 for storing the terminal identities (IMEI, columns 62 to 64) allowable to said subscriber identity (IMSI, column 61) is created in connection with the home location register HLR. An existing table, file or data base may alternatively be expanded to include the data of table 60 (column 5, lines 28-35)],

(2) the mobile station transmitting the mobile equipment identity associated with the mobile station and at least one mobile subscriber identity [i.e., Figure 7 illustrates subscriber authentication according to the invention. At stage 71 the centre MSC/VLR receives a subscriber identity IMSI and a mobile identity IMEI.sub.MS from a mobile station in connection with location up-dating (column 5, lines 64-67)],

(3) checking whether there is a record in the database, which contains a mobile equipment identity corresponding to the mobile equipment identity transmitted by the mobile station, and if there is a record in the database,

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checking whether the record includes a mobile subscriber identity corresponding to the mobile subscriber identity transmitted by the mobile station, and, if there is no record in the database, producing at least a signal indicating that the mobile equipment identity is possibly a copied one [i.e, referring to Figure 7, At stage 72 an inquiry is sent to the home location register HLR by using the IMSI received. At stage 73 the MSC/VLR receives from the home location register a list of IMEI codes IMEI.sub.HLR corresponding to the IMSI. At stage 74 a check is made to see if IIV is in use, and if not, at stage 75 the MS location updating is accepted. If IIV is in use, a check is made at stage 76 to see if the IMEI.sub.MS sent by the mobile station is included in the IMEI.sub.HLR list sent by the home location register HLR, i.e. if it corresponds to one of the IMEI.sub.HLR identifiers sent by the home location register HLR. If this is the case, the MS location updating is accepted at stage 75. Otherwise the location updating is rejected at stage 77 and the use of the mobile station is prohibited (column 6, lines 8-19). Furthermore, as shown in Figure 8, if IIV is not in use, the MSC/VLR sends to the mobile station an acknowledgement 85 of accepted location updating. A positive acknowledgement 85 is also sent if the IMEI.sub.MS sent by the mobile station corresponds to one of the IMEI.sub.HLR identifiers sent by the home location register HLR. A negative acknowledgement 86 is sent if IIV is in use for said subscriber and the IMEI.sub.MS sent by the mobile station does not correspond to any of the IMEI.sub.HLR identifiers sent by the home location register HLR (column 6, lines 29-37). In the scope of Kortessalmi, the use of a copied SIM card refers to any technique of using fraudulently the SIM card data of another mobile subscriber (column 4, lines 33-35)].

ii. Although Kortessalmi does not clearly states if there is no record (or not correspond or match of identities) in the database, produce at least a signal (or acknowledgement), Kortessalmi does imply that a negative acknowledgement 86 is sent if IIV is in use for said subscriber and the IMEI.sub.MS sent by the mobile station does not correspond to any of the IMEI.sub.HLR identifiers sent by the home

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location register HLR (column 6, lines 29-37), which indicates the mobile device may have been stolen or misused or illegal used.

iii. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) clearly disclose and keep track of all the information about the mobile device or mobile identities within the storage or database since the use of a copied SIM card refers to any technique of using fraudulently the SIM card data of another mobile subscriber (**column 4, lines 33-35 of Kortessalmi**).

iv. The ordinary skilled person would have been motivated to:

(1) clearly disclose and keep track of all the information about the mobile device or mobile identities within the storage or database to prevent the unauthorized users from being accessed to the mobile device.

b. Referring to claims 2 and 3:

i. These claims have limitations that is similar to those of claim 1 part (3), thus they are rejected with the same rationale applied against claim 1 part (3) above.

c. Referring to claim 4:

i. Kortessalmi further teaches:

(1) wherein step (3) is performed when the mobile station updates its location [i.e., **Figure 7 illustrates subscriber authentication according to the invention. At stage 71 the centre MSC/VLR receives a subscriber identity IMSI and a mobile identity IMEI.sub.MS from a mobile station in connection with location up-dating (column 5, lines 64-67)]].**

d. Referring to claim 5:

i. Kortessalmi further teaches:

(1) wherein step (3) is performed at predefined intervals [i.e., referring to Figures 7 and 8, **“performing at predefined intervals” is considered to be used in the subscriber authentication**].

e. Referring to claim 6:

i. Kortessalmi further teaches:

(1) wherein the database is created in the home location register [i.e., two types of data bases are involved in the routing of calls. Subscriber data on all subscribers is stored in a home location register HLR permanently or semi-permanently, including information on the services the subscriber can access and the present location of the subscriber. An other type of register is a visitor location register VLR (column 1, lines 54-58)].

f. Referring to claim 7:

i. This claim has limitations that is similar to those of claim 1, thus it is rejected with the same rationale applied against claim 1 above.

g. Referring to claim 8:

i. This claim has limitations that is similar to those of claim 2, thus it is rejected with the same rationale applied against claim 2 above.

h. Referring to claim 9:

i. Kortessalmi teaches:

(1) an element of a mobile network, which comprises a database, containing records, each record containing an international mobile equipment identity associated with a mobile station and at least one international mobile subscriber identity [i.e., referring to Figures 6-8, the parts of a mobile communication network, a table 60 for storing the terminal identities (IMEI, columns 62 to 64) allowable to said subscriber identity (IMSI, column 61) is created in connection with the home location register HLR. An existing table, file or data base may alternatively be expanded to include the data of table 60 (column 5, lines 28-35)].

***Response to Argument***

4. Applicant's arguments filed March 18, 2005 have been fully considered, and the new ground(s) of rejection is addressed above.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Dynarski et al (US 6,272,129) discloses The Call Control Task 114 maintains a list of dynamic call database (DCD) records. A DCD record is added to the

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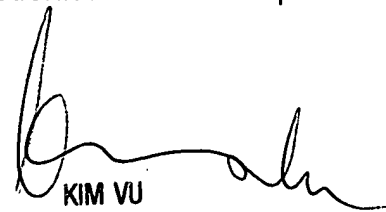
list when a connection is setup with the CBSC and deleted when a session close timer expires or any other disconnect reason (normal or abnormal). Each record contains a collection of information on a per call basis, such as access information into frame relay task for communications with the CBSC, and with the MARC card; session Ids; the Mobile IMSI/MIN, and ESN numbers for the mobile device; the CBSC Number; a CBSC identifier for the last active packet data session; service configuration identifiers for the last active packet data session; mobility information such as the termination status of the mobile (column 11, lines 65-67 through column 12, lines 1-11).

b. Bridges et al (US 6,148,197) discloses an apparatus for selecting a preferred wireless carrier from a plurality of wireless carriers for use by a mobile station when the mobile station is roaming outside of a home market area is provided. The apparatus comprises a database, a generator, and a data providing device. The database stores preferred wireless carrier identities for a plurality of market areas based upon predetermined classes of service, predetermined national accounts, and predetermined home market areas (see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

  
KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

TBT

May 19, 2005